



The fifty-seventh meeting of the Society was not held, as at the date set for same the California Academy of Sciences was moving into its new building in the Golden Gate Park, San Francisco.
F. E. BLAISDELL, Secretary.

The fifty-eighth regular meeting of the Society was held on the evening of December 11, 1915, in Room 503 of the Mechanics Institute, 57 Post Street, San Francisco.

President Van Dyke in the chair.

The minutes of the preceding meeting were read and approved.

The following eleven members responded to roll call:

F. W. Nunenmacher, Dr. E. C. Van Dyke, J. C. Huguenin, Dr. F. E. Blaisdell, Ralph Hopping, Miss Alice Eastwood, L. R. Reynolds, C. L. Fox, Wm. F. Breeze, E. P. Van Duzee, J. O. Graves.

The following five guests were present:

Mrs. L. R. Reynolds, Mrs. J. O. Graves, Mrs. Ralph Hopping, Mrs. F. E. Blaisdell, C. J. Pierson.

The report of the Treasurer was then read.

A communication from Mr. Fordyce Grinnell was read, stating among other things a desire to withdraw from the Society. It was voted that he be requested to reconsider his action. In another and more recent letter Mr. Grinnell enclosed an interesting letter from Mr. R. H. Stretch of Seattle, Washington, and this was submitted to the members for perusal. Mr. Grinnell wished the Society a profitable meeting, stating that the Lorquin Natural History Club of Los Angeles had just enjoyed a fine meeting. Miss Julia Wright, in a letter, expressed regret at not being able to attend the meeting, and sent her best regards to all of the members present.

The annual election of officers was next considered. It was proposed and seconded that the same officers be retained for another year. The motion was carried, and the officers were declared re-elected, as follows:

Dr. E. C. Van Dyke, President; J. E. Cottle, Vice-President; Dr. F. E. Blaisdell, Secretary and Treasurer.

Mr. Breeze, being called upon to report his summer's work, said that he had taken a trip through Calaveras County to Lake Tahoe, and that he had collected a few species of *Lepidoptera* and *Coleoptera*.

Mr. Hopping, in responding to a request for remarks, stated that he had been in the field from March to November, working all of the time with the *Coleoptera*. He said that *Chrysobothris dentipes* stands up at full legs-length when rest-

ing on logs, and that he had not observed other species doing so. Two new species of the genus were taken. Mr. Hopping gave special attention to the collecting of *Ipidæ*, and took nearly all of the species known to occur in the State.

Mr. Nunenmacher reported that he could predict the character of the season by the position of the chrysalids of *Papilio rutulus*,—i. e., if the season is to be mild they hang to the East; if severe they hang to the North.

Mr. Reynolds stated that he had made two good trips during the summer. At Mt. St. Helena, Napa County, collecting was good on May 30, 1915. The sweeping of shrubbery and meadows gave particularly good results. A rare longicorn was taken and many elaters. On the summit of Mt. St. Helena, the tops of oaks and pines were found full of good things. *Lepidoptera* were scarce both in species and individuals. The second trip was on July 1, to Sequoia National Park, staying a week at Ranger; then to Twin Lakes on horseback, where *Coleoptera* was very scarce and *Lepidoptera* abundant at an elevation of 10,200 ft. From there a trip was made to Three Rivers, where both of the orders above mentioned were plentiful.

Mr. Huguenin reported spending one week at Jules Station, Marin County, Calif., where *Lepidoptera* was abundant and *Coleoptera* moderately so during the latter part of June. Mr. Huguenin exhibited and explained a new and ingenious device for catching *Catocalæ*.

Mr. Fox spent his vacation at the Tuolumne Meadows with the Sierra Club during July, 1915.

Mr. Van Duzee was at Fallen Leaf Lake, near Lake Tahoe, during the summer. He reported the collecting as having been good in the early part of July. All of the orders were taken.

Mr. Graves said that he had found collecting very poor at Paterson, Stanislaus County, Calif., during the latter part of March.

Miss Eastwood stated that she had visited Mt. Rainier National Park, and was surprised to find that it was necessary to get a permit from the Chief Ranger of the Park to collect flowers or any botanical specimens.

Mr. Fox said that he had met with the same trouble in regard to insects at Yosemite.

Mr. Hopping stated that he believed the difficulty arose from the Ranger's taking in a literal sense the order that, "nothing shall be taken from the National Parks."

The members present were unanimous in considering such a view of the rules as blocking scientific research. It was believed that in the formulation of the law no such interpreta-

tion was intended, as would prevent entomologists or other naturalists from pursuing their respective studies by collecting, as long as they obeyed the law in not destroying vegetation. It was stated as an illustration that a certain man wishing to post a notice could not find a suitable place, so he cut a stick from the shrubbery and posted his notice. A Ranger came along and arrested him for cutting and mutilating the shrubbery. The Society was unanimous in a decision to call the proper authorities' attention to such a ridiculous prostitution of the law.

Mr. Huguenin exhibited a box of specimens illustrating the different stages in the life history of several species of insects of different orders.

Mr. Fox passed around a box of miscellaneous insects, including *Diptera*, *Hymenoptera* and *Lepidoptera*.

Mrs. Reynolds displayed a beautifully prepared series of *Lepidoptera* in transparent mounts.

Mr. Breeze exhibited two boxes of mixed insects, and Mr. Reynolds a box of *Coleoptera*.

After considerable time devoted to discussion and comparison of exhibits, the meeting adjourned.

F. E. BLAISDELL, Secretary.

The fifty-ninth regular meeting of the Society was held on Saturday evening, March 11, 1916, in the Board Room of the Mechanics Institute, 57 Post Street, San Francisco.

President Van Dyke in the chair.

The minutes of the preceding meeting were read and approved.

Thirteen members answered the roll call, as follows:

Dr. E. C. Van Dyke, J. E. Cottle, J. C. Huguenin, Dr. F. E. Blaisdell, R. F. Sternitzky, L. R. Reynolds, C. L. Fox, Wm. F. Breeze, E. O. Essig, E. P. Van Duzee, O. N. Sanford, J. O. Graves, and Mrs. E. C. Van Dyke.

Seven guests were present:

Mrs. J. E. Cottle, Mrs. F. E. Blaisdell, Mrs. L. R. Reynolds, Mrs. J. O. Graves, Miss Elsie M. Carlyon, C. A. Hill, and G. F. Moznette.

The report of the Treasurer was then read.

A communication was read from Dr. F. C. Clark, in which he sent greetings and best wishes to the Society, stating that during the last few years he had given more attention to invertebrate paleontology than to Entomology; also, that he had a few thousands insects on hand. In his "work-shop" he kept his collections together with all of the library formerly owned by our friend Rivers, together with many of his specimens.

Among the effects that Rivers gave him are a lot of letters from Horn, Casey, and others, that are particularly interesting. A postal from Horn to Rivers was enclosed in his letter. It was submitted to the Society.

A word of greeting to the Society was read from J. G. Grundel. Two communications from Dr. R. E. Kunzé and Mr. H. Wormshacher were enclosed, the former desiring to purchase chrysalids of *Papilio*, *Colias*, and *Eglanderina*; the latter to exchange *Lepidoptera*.

A letter from Mr. Fordyce Grinnell, Jr., was read. It contained a list of persons interested in entomology, and it was suggested that invitations be sent to them to attend the meeting. The letter was received too late to permit doing so.

The question of a Field Day was next discussed. It was decided by vote that the President appoint a committee to decide on a suitable locality for the same, and the following committee was appointed: L. R. Reynolds, Wm. F. Breeze, and O. N. Sanford. They were instructed to report to the Secretary.

Mr. C. A. Hill was proposed for membership by Mr. Grinnell and Dr. Blaisdell. The proposal was seconded by Mr. Cottle. The election was unanimous, and Mr. Hill's name was duly entered upon the roll-book.

The subject for the evening was a symposium on the *Coleoptera*.

Mr. Reynolds was called upon to consider the faunal areas of Mexico.

Mr. Reynolds' communication follows:

The boundary of Mexico and the United States is a faunal boundary.

North of the Rio Grande on the east we find the typical Texan forms, while immediately south of the boundary we find the humid tropics with Toncans, Jacanas, Motmots and Heliconias.

The western part of the boundary is also the northern limit of an abundance of many forms, such as parrots, trogons, etc. North of the boundary we find the northern or winter rainy season, and south of the boundary the tropical or summer rainy season.

There are five distinct faunal areas:

- 1—The eastern humid coastal plain.
- 2—Northern arid plateau.
- 3—Southern humid plateau.
- 4—Northwestern arid coastal plain.
- 5—Southwestern semi-humid coastal plain.

The eastern humid coastal plain is full humid tropical throughout, the rainfall increasing to the south until at the Guatemalan border the forests are dripping nine months of the year. Life is abundant, but not as varied as on the slope up to the plateau.

The northern arid plateau is a continuation of the Arizona and New Mexican desert. Cacti are very abundant and varied. Following a wet season, insects swarm.

The southern humid plateau is interspersed with high volcanic peaks and has the richest fauna of all Mexico.

The northwestern arid coastal plain is a chaparral plain very rich in life. Rainfall, but a few inches at the border, increases steadily south until, at Mazatlan, crops are grown without irrigation. Frosts occur occasionally as far as a thousand miles south of the boundary.

The southwestern semi-humid coastal plain resembles superficially the northern part of the eastern coastal plain, but has a very different fauna. The rainfall averages but a third of the same latitude on the east coast.

The central plateau drops abruptly to the coastal plains, both east and west, and this slope is exceedingly interesting to the collector. The top of the eastern slope, with a width of not over ten miles, is a region of excessive rainfall.

Mr. Van Duzee gave a review of his work in Jamaica and Florida, as follows (synopsis):

JAMAICA.

Time on island, March 23 to April 19, 1906.

Winter, dry season there; rains begin in April.

Summers, warm and moist; heavy rains in autumn; becoming dry in November.

Insects taken by me, mostly hold-overs having survived the dry season; summer collecting best.

Country along lines of travel mostly under cultivation, except on rocky hillsides. About Kingston, land low and parched with little vegetation. Acacia jungles on rocky hills and mahogany trees on dry, rolling lands. Marshes along rivers and rank vegetation in ravines.

Blue Mountain, over 7,000 feet high, with tropical vegetation and fine collecting.

Middle of island, limestone formation called cockpit country, with many caves and rich growths.

Western end of island low with poor collecting.

Best collecting at Mandeville, 2,000 feet altitude, where there is open waste land and pastures.

Took 234 species of Hemiptera, over one-third of which were new.

FLORIDA.

Time, middle of April to middle of March, 1908.

Northern part of state largely cultivated, old orange groves, etc. Collecting good along streams and about the lake shore.

Most of state level as a floor, with tall trees of long-leaved pine. Soil, largely sand.

Best collecting on palmetto hummock and in slight depressions of the pine barrens.

About Tampa, the country is barren with scrub oaks.

At St. Petersburg and Clearwater, collecting good on the small hills and in the marshes.

At Ft. Meyers and Estero, in pine barrens, fine collecting in clearings and along rivers.

Results, 354 species of Hemiptera, about one-twelfth of which were new.

Dr. Van Dyke gave an instructive review of the order *Coleoptera*.

Mr. Moznette, in response to a request gave a review of his studies in the Chrysomelid Tribe *Halticini*, which is his specialty.

Dr. Blaisdell reviewed briefly the Tenebrionid Tribes and Genera, with their distribution, habits and peculiarities.

Mr. Huguenin exhibited a board taken from a cupboard in which the larvae of *Hylotrupes bajulus* Linn. had been working for about seven years. The board had been in the kitchen of Mr. Munier's for that length of time. Noises had been heard from time to time in the side of the cupboard. Two imagoes finally emerged and were submitted to Dr. Blaisdell for identification.

Discussion on the several very interesting topics of the evening continued until adjournment.

F. E. BLAISDELL, Secretary.

The sixtieth regular meeting, or Field Day, of the Society was held on May 7, 1916, at Pilarcitas Lake, San Mateo County, Calif.

Thirteen members were in attendance, as follows:

Dr. and Mrs. E. C. Van Dyke, F. W. Nunenmacher, Chas. Fox, Chas. Hill, Mr. and Mrs. Ralph Hopping, Mr. and Mrs. L. R. Reynolds, Dr. and Mrs. F. E. Blaisdell, Mr. O. N. Sanford, and Mr. E. P. Van Duzee.

Two guests were present, namely: Mr. E. R. Leach and Master Bertram Sanford.

The day was pleasant, and collecting was good. A number

of interesting specimens were taken, among which were *Cychrus cordatus*, *Saperda hornii*, *Anisodactylus parvulus* Casey, the latter being a black race of *nivalis*, as some of the melanotic specimens showed very faintly the color markings of the typical race, which was also taken at the same time. The above is a new locality record for *Cychrus cordatus*, the specimen being taken by Mr. Hopping. Mr. Van Duzee reported taking some fine Hemiptera.

F. E. BLAISDELL, Secretary.

